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# **MEMBERSHIP LISTS OF IUPAC BODIES 1977-1979**

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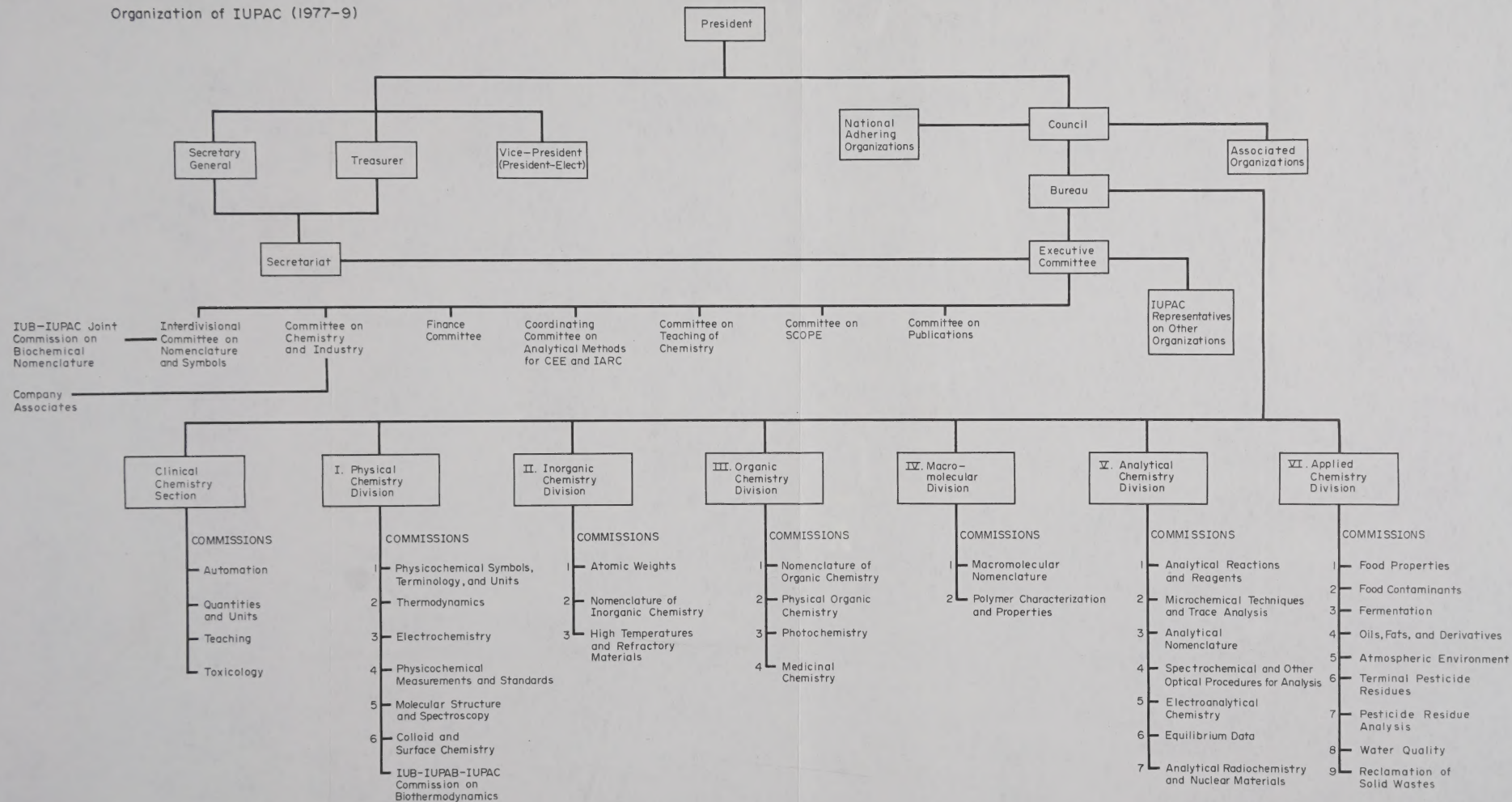
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Novo Allé,  
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F L Smidth & Co.,  
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Superfos A/S,  
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DK-2950 Vedbaek, Denmark.

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Chemische Werke Hüls AG,  
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Degussa AG,  
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Dynamit Nobel AG,  
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E Merck AG,  
Postfach 4119, Frankfurter Strasse 250,  
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Reuterweg 14,  
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Schering AG,  
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Süd-Chemie AG,  
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Union Rheinische Braunkohlen Kraftstoff AG,  
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- Glaxo Group Ltd.,  
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Pullman Kellogg,  
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Ralston Purina Co.,  
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R. J. Reynolds Tobacco Co.,  
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A. H. Robins Co. Inc.,  
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Rohm and Haas Co.,  
Norristown and McKean Roads,  
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Schering Corp.,  
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## CHEMRAWN PLANNING COMMITTEE\*

*(Established 1976)*

### *Chairman*

- 1976- Dr. B. W. ROSSITER,  
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(TEL: 716-458 1000)

### *Members*

- 1976- Prof. A. ABOU-EL-AZM,  
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101 Kasr El Eini Street,  
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- 1976- Dr. J. W. BARRETT,  
195 Latymer Court, Hammersmith Road,  
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- 1976- Prof. D. BEHRENS,  
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- 1976- Dr. H. EGAN,  
Laboratory of the Government Chemist, Department of  
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Cornwall House, Stamford Street,  
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- 1976- Prof. C. G. OVERBERGER,  
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Ann Arbor, Michigan 48109, USA.
- 1976- Prof. G. E. ZAIKOV,  
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- 1976- Prof. H. ZOLLINGER,  
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\*CHEMRAWN = Chemical Research Applied to World Needs

## COMMITTEE ON PUBLICATIONS (CP)\*

*(Established in its present form 1969)*

### *Chairman*

- 1969- Dr. H. GRÜNEWALD,  
Gesellschaft Deutscher Chemiker,  
Boschstrasse 12,  
D-6940 Weinheim, Federal Republic of Germany.  
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### *Members*

- 1977- Dr. C. T. BISHOP,  
Publishing Department, National Research Council of  
Canada,  
Ottawa, Ontario K1A 0R6, Canada.
- 1974- Dr. K. BLÁHA,  
Institute of Organic Chemistry and Biochemistry,  
Československá Akademie Věd,  
Flemingovo Náměstí 2,  
CS-166 10 Praha 6-Dejvice, Czechoslovakia.
- 1978- Prof. S. CLAESSION,  
Fysikalisk-Kemiska Institutionen, Uppsala Universitet,  
POB 532, Thunbergsvägen 5,  
S-751 21 Uppsala 1, Sweden.
- 1978- Dr. D. P. DEN OS,  
Koninklijke Nederlandse Chemische Vereniging,  
Burnierstraat 1,  
NL-2018 's-Gravenhage, Netherlands.
- 1973- Prof. A. PEREZ-MASIÁ,  
Instituto de Química Física "Rocasolano", Consejo  
Superior de Investigaciones Científicas,  
Serrano 119,  
Madrid-6, Spain.
- 1978- Dr. I. A. WILLIAMS,  
Chemical Society,  
Burlington House, Piccadilly,  
London W1V 0BN, UK.

*Scientific Editor of PAC*

(to be appointed)

\*For Standing Orders, see page 180.

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*Scientific Editor*

(to be appointed)

## **COMMITTEE ON SCOPE (CS)\***

*(Established 1971)*

### *Chairman*

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### *Members*

(Revised membership under consideration)

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*(Established 1977)*

### *Chairman/Members*

(to be appointed)

\*For Standing Orders, see page 181.

† For Standing Orders, see page 182.



## COMMITTEE ON TEACHING OF CHEMISTRY (CTC)\*

*(Established 1963)*

### *Chairman*

- 1971- Prof. C. N. R. RAO,  
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### *Secretary*

- 1977- Prof. D. J. WADDINGTON,  
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### *Members*

- 1974- Prof. I. V. BEREZIN,  
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- 1975- Prof. G. S. HAMMOND,  
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- 1974- Prof. G. ILLUMINATI,  
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- 1974- Prof. M. LAFFITTE,  
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- 1973- Prof. D. VITOROVIČ,  
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\*For Standing Orders, see page 183.

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- Sweden* Prof. N. G. VANNERBERG,  
1976-1979 Department of Inorganic Chemistry, Chalmers University  
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- Switzerland* Prof. A. S. DREIDING,  
1970-1979 Organisch-Chemisches Institut der Universität Zürich,  
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- United Kingdom* Dr. M. D. ROBINSON,  
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- United States of America* Prof. W. B. COOK,  
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- Union of Soviet Socialist Republics* Prof. E. M. SOKOLOVSKAYA,  
1976-1979 Department of Chemistry, Lomonosov Moscow State  
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- 1973- Dr. K. KOJIMA,  
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\*For Standing Orders, see page 184.



- 1971- Dr. R. MARCUSE,  
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\*For Standing Orders, see page 186.

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- 1969-1979 Prof. D. H. EVERETT,  
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**ISO/TC 12: Quantities, Symbols, Conversion Factors, and  
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**ISO/TC 12/SC 2: General Rules for Use of SI Units,  
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- 1971-1979 Prof. N. IBL,  
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- 1975-1979 Prof. S. TRASATTI,  
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## **I.4 COMMISSION ON PHYSICOCHEMICAL MEASUREMENTS AND STANDARDS**

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## **I.5 COMMISSION ON MOLECULAR STRUCTURE AND SPECTROSCOPY**

*(Established 1955)*

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## I.6 COMMISSION ON COLLOID AND SURFACE CHEMISTRY

*(Established 1961)*

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#### *Secretary*

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## II INORGANIC CHEMISTRY DIVISION

(Established 1949)

### DIVISION COMMITTEE

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#### *Vice-President*

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- 1975-1979 Prof. K. B. YATZIMIRSKII,  
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## II.1 COMMISSION ON ATOMIC WEIGHTS

(Established 1930)

### Titular Members

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- 1975-1979 Prof. H. G. THODE,  
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## II.2 COMMISSION ON NOMENCLATURE OF INORGANIC CHEMISTRY

*(Established 1921)*

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- 1977-1981 Dr. T. D. COYLE,  
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- \*1977-1981 Prof. E. FLUCK,  
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## II.3 COMMISSION ON HIGH TEMPERATURES AND REFRACTORY MATERIALS

*(Established 1951)*

### **Titular Members**

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- 1969-1979 Prof. C. B. ALCOCK,  
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### III ORGANIC CHEMISTRY DIVISION

(Established 1949)

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- 1973-1979 Prof. P. YATES,  
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- 1977-1981 Prof. J. WRÓBEL,  
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### III.1 COMMISSION ON NOMENCLATURE OF ORGANIC CHEMISTRY

*(Established 1921)*

#### **Titular Members**

##### *Chairman*

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### III.2 COMMISSION ON PHYSICAL ORGANIC CHEMISTRY

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#### **Titular Members**

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## **IV        MACROMOLECULAR DIVISION**

*(Established 1967)*

### **DIVISION COMMITTEE**

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#### *Vice-President*

- 1975-1981 Prof. C. H. BAMFORD,  
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#### *Secretary*

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- 1977-1981 Prof. M. MANDEL,  
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## V.7 COMMISSION ON ANALYTICAL RADIO-CHEMISTRY AND NUCLEAR MATERIALS

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- 1977-1981 Dr. D. COMAR,  
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- 1971-1979 Dr. F. GIRARDI,  
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- 1977-1981 Prof. F. LUX,  
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- 1975-1979 Dr. T. A. RAFTER,  
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## **VI            APPLIED CHEMISTRY DIVISION**

*(Established 1949)*

### **DIVISION COMMITTEE**

#### *President*

- 1971-1981 Prof. H. SUOMALAINEN,  
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- 1975-1981 Dr. R. MARCUSE,  
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- 1975-1979 Prof. D. REYMOND,  
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- 1977-1981 Prof. K. VAS,  
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- 1977-1981 Drs. H. J. VOS,  
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## **VI.1 COMMISSION ON FOOD PROPERTIES**

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### **Titular Members**

#### *Chairman*

- 1971-1979 Dr. E. O. HAENNI,  
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#### *Secretary*

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- 1971-1979 Prof. G. GRIMMER,  
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- 1975-1979 Dr. S. J. KUBACKI,  
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- 1975-1979 Prof. M. NIKONOROW,  
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- 1975-1979 Mr. B. A. SCHATZ,  
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- 1975-1979 Dr. D. E. COFFIN,  
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Foods Directorate, Health Protection Branch, Department  
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- 1973-1979 Mr. I. R. C. McDONALD,  
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- 1977-1979 Dr. A. E. WASSERMAN,  
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- Austria* Dr. P. CZEDIK-EYSENBERG,  
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- Czechoslovakia* Prof. J. DAVÍDEK,  
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## **VI.2 COMMISSION ON FOOD CONTAMINANTS**

*(Established in its present form 1971)*

### **Titular Members**

#### *Chairman*

- 1973-1979 Dr. K. KOJIMA,  
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#### *Secretary*

- 1975-1979 Dr. L. E. COLES,  
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- 1973-1979 Dr. A. D. CAMPBELL,  
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- 1975-1979 Dr. M. JEMMALI,  
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- 1971-1979 Dr. P. KROGH,  
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- 1975-1979 Mr. M. V. TRACEY,  
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- 1975-1979 Prof. F. BRO-RASMUSSEN,  
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- 1975-1979 Dr. H. GUTHENBERG,  
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- 1975-1979 Dr. W. KRÖNERT,  
Max-von-Pettenkofer Institut des Bundesgesundheitsamtes,  
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- 1973-1979 Dr. J. D. LITTLEHAILES,  
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- 1977-1979 Dr. K. OHNO,  
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- 1977-1979 Dr. P. L. SCHULLER,  
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- 1973-1979 Dr. P. S. STEYN,  
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#### **National Representatives**

- Federal Republic of Germany* 1977-1979 Dr. H. LANGE,  
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- Poland* 1977-1979 Prof. T. JUSZKIEWICZ,  
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**COORDINATING COMMITTEE ON FOOD  
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*Chairman*

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### **VI.3 COMMISSION ON FERMENTATION**

*(Established in its present form 1975)*

#### **Titular Members**

##### *Chairman*

- 1973-1979 Prof. A. E. HUMPHREY,  
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##### *Vice-Chairman*

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##### *Secretary*

- 1975-1979 Dr. R. C. RIGHELATO,  
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- 1977-1981 Prof. C. COONEY,  
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- 1977-1981 Prof. T. K. GHOSE,  
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- 1975-1979 Prof. J. HOLLÓ,  
Central Research Institute for Chemistry, Hungarian  
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- 1975-1979 Prof. K. YAMADA,  
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- 1977-1981 Prof. H. T. BLACHERE,  
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- 1975-1979 Dr. V. K. EROSHIN,  
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- 1975-1979 Prof. A. FIECHTER,  
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- 1977-1981 Dr. J. C. HOOGERHEIDE,  
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's Gravenhage, Netherlands.
- 1971-1979 Dr. F. PARISI,  
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- 1975-1979 Prof. S. J. PIRT,  
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- 1975-1979 Prof. G. TAKAHASHI,  
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- United States of America* Dr. A. F. LANGLYKKE,  
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## VI.4 COMMISSION ON OILS, FATS, AND DERIVATIVES

*(Established in its present form 1977)*

### Titular Members

#### *Chairman*

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#### *Secretary*

- 1977-1981 Dr. A. HAUTFENNE,  
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- 1975-1979 Dr. D. FIRESTONE,  
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- 1977-1981 Dr. J. POKORNÝ,  
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- Ireland* Mr. B. McGWYNNE,  
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- United Kingdom* Dr. K. A. WILLIAMS,  
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- United States of America* Dr. W. E. LINK,  
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**WORKING GROUPS OF COMMISSION ON OILS,  
FATS, AND DERIVATIVES**

**WG 2      Determination of Total Oxidized Fatty Acids by TLC and  
Densitometry**

Prof. M. NAUDET (Chairman—France), Mme. J. CASTANG (France), Dr. D. G. CHOBANOV (Bulgaria), Dr. A. DIEFFENBACHER (Switzerland), Dr. D. FIRESTONE (USA), Mlle. B. JACOBSBERG (Belgium), Dr. E. KURUCZ (Hungary), Mr. A. T. MØLLER (Denmark), Dr. R. OHLSON (Sweden), Dr. J. POKORNÝ (Czechoslovakia), Drs. H. J. VOS (Netherlands), Dr. K. A. WILLIAMS (UK), Prof. W. ZWIERZYKOWSKI (Poland).

**WG 3      Determination of Tocopherols (free and esterified) in Oils,  
Fats, and Margarine**

Drs. P. W. HENDRIKSE (Chairman—Netherlands), Ing. C. CAROLA (Italy), Mme. J. CASTANG (France), Mme. C. COURCELLES (France), Prof. E. L. DELVAUX (Belgium), Dr. N. D. EMBREE (USA), Dr. D. FIRESTONE (USA), Dr. J. GRACIAN TOUS (Spain), Mlle. B. JACOBSBERG (Belgium), Dr. A. R. JOHNSON (Australia), Dr. R. OHLSON (Sweden), Prof. C. PAQUOT (France), Mr. W. D. POCKLINGTON (UK), Dr. H. T. SLOVER (USA), Dr. J. P. WOLFF (France), Mr. F. ZWOBADA (France).

**WG 4      Determination of Chlorinated Pesticides in Oils and Fats**

Prof. E. L. DELVAUX (Chairman—Belgium), Prof. T. ASAHARA (Japan), Mme. J. CASTANG (France), Dr. D. FIRESTONE (USA), Dr. J. GRACIAN TOUS (Spain), Dr. P. A. GREVE (Netherlands), Dr. T. HASHIMOTO (Japan), Prof. V. M. KAPOULAS (Greece), Mr. A. T. MØLLER (Denmark), Prof. R. MONACELLI (Italy), Dr. R. OHLSON (Sweden), Ing. L. G. M. TH. TUINSTRA (Netherlands), Dr. H. H. R. H. WENDT (Federal Republic of Germany), Dr. K. A. WILLIAMS (UK).

**WG 5      Determination of Content of cis-cis Linoleic Acid of Oils,  
Fats, and Margarine**

Dr. Ö. LEVIN (Chairman—Sweden), Dr. J. BEARE-ROGERS (Canada), Dr. D. FIRESTONE (USA), Dr. A. R. JOHNSON (Australia), Mr. A. T. MØLLER (Denmark), Dr. R. OHLSON (Sweden), Prof. H. WESSELS (Federal Republic of Germany), Dr. K. A. WILLIAMS (UK).

**WG 6****Determination of Oil Content of Oil Seeds by NMR Techniques**

Dr. J. P. WOLFF (Chairman—France), Dr. J. A. CORNELIUS (UK), Dr. D. FIRESTONE (USA), Dr. J. GRACIAN TOUS (Spain), Mr. A. H. GUNN (Australia), Drs. P. W. HENDRIKSE (Netherlands), Dr. E. KURUCZ (Hungary), Mr. A. T. MØLLER (Denmark), Prof. M. NAUDET (France), Drs. H. J. VOS (Netherlands), Dr. K. A. WILLIAMS (UK), Prof. W. ZWIERZYKOWSKI (Poland).

**WG 7****Changes Taking Place in Oils and Fats during Deep Fat Frying**

Prof. H. WESSELS (Chairman—Federal Republic of Germany), Dr. J. BEARE-ROGERS (Canada), Dr. H. BRÜSCHWEILER (Switzerland), Mme. J. CASTANG (France), Mme. C. COURCELLES (France), Dr. A. DIEFFENBACHER (Switzerland), Mr. U. ENGELRUD (Denmark), Prof. M. GASSIOT-MATAS (Spain), Dr. J. GRACIAN TOUS (Spain), Mr. T. GRIMSVANG (Norway), Prof. J. HOLLÓ (Hungary), Miss B. JACOBSBERG (Belgium), Dr. E. KURUCZ (Hungary), Prof. M. NAUDET (France), Dr. R. OHLSON (Sweden), Mr. M. E. PATTINSON (New Zealand), Mr. A. PETERSEN (Denmark), Dr. J. POKORNÝ (Czechoslovakia), Prof. A. RUTKOWSKI (Poland), Prof. E. TISCORNIA (Italy), Drs. H. J. VOS (Netherlands), Dr. A. WALKING (USA), Dr. K. A. WILLIAMS (UK), Mr. F. ZWOBADA (France).

**WG 8****Identification and Determination of Emulsifiers (derived from fatty material) in Oils, Fats, Fat Products, and Cosmetics**

Dr. H. BRÜSCHWEILER (Chairman—Switzerland), Prof. T. ASAHARA (Japan), Dr. A. DIEFFENBACHER (Switzerland), Mr. U. ENGELRUD (Denmark), Dr. D. FIRESTONE (USA), Dr. A. HAUTFENNE (Belgium), Dr. E. KURUCZ (Hungary), Mr. A. T. MØLLER (Denmark), Prof. R. MONACELLI (Italy), Dr. T. NAGAI (Japan), Dr. R. OHLSON (Sweden), Dr. J. POKORNÝ (Czechoslovakia), Dr. M. TEUPEL (Federal Republic of Germany), Drs. H. J. VOS (Netherlands), Drs. J. C. van der WEEL (Netherlands), Dr. H. H. R. H. WENDT (Federal Republic of Germany), Dr. K. A. WILLIAMS (UK), Dr. J. P. WOLFF (France), Prof. W. ZWIERZYKOWSKI (Poland).



**WG 9****6th Edition of Standard Methods for Analysis of Oils, Fats, and Soaps**

Prof. C. PAQUOT (Chairman—France), Prof. E. L. DELVAUX (Belgium), Dr. A. HAUTFENNE (Belgium), Dr. P. R. E. LEWKOWITSCH (UK), Dr. W. E. LINK (USA), Mr. A. T. MØLLER (Denmark), Drs. H. J. VOS (Netherlands), Dr. J. P. WOLFF (France).

**WG 11****Determination of Total Fat Content of Margarine**

Prof. M. NAUDET (Chairman—France), Dr. J. BEARE-ROGERS (Canada), Prof. E. L. DELVAUX (Belgium), Mr. U. ENGELRUD (Denmark), Dr. D. FIRESTONE (USA), Dr. J. GRACIAN TOUS (Spain), Mr. B. McGWYNNE (Ireland), Mlle. B. JACOBBERG (Belgium), Dr. E. KURUCZ (Hungary), Dr. O. LEVIN (Sweden), Prof. R. MONACELLI (Italy), Dr. R. OHLSON (Sweden), Mr. A. PETERSEN (Denmark), Mme. M. T. RICHERT (France), Drs. H. J. VOS (Netherlands), Dr. H. H. R. H. WENDT (Federal Republic of Germany), Prof. W. ZWIERZYKOWSKI (Poland).

**WG 12****Determination of Plastic Polymers in Oils and Fats**

Drs. J. C. Van der WEEL (Chairman—Netherlands), Dr. D. FIRESTONE (USA), Dr. J. GRACIAN TOUS (Spain), Mr. B. McGWYNNE (Ireland), Dr. M. TEUPEL (Federal Republic of Germany), Dr. J. P. WOLFF (France).

**WG 13****Determination of Undesirable Plastic-based Contaminants (other than polyethylene) in Oils and Fats**

Dr. Ö. LEVIN (Chairman—Sweden), Prof. E. L. DELVAUX (Belgium), Dr. D. FIRESTONE (USA), Dr. J. P. WOLFF (France).

**WG 14****Revision of Determination of Unsaponifiable Matter: Method II.D.5**

Prof. M. NAUDET (Chairman—France), Dr. H. BRÜSCHWEILER (Switzerland), Ing. C. CAROLA (Italy), Mme. J. CASTANG (France), Mr. J. DIZIER (France), Dr. D. FIRESTONE (USA), Dr. J. GRACIAN TOUS (Spain), Mr. B. McGWYNNE (Ireland), Dr. E. KURUCZ (Hungary), Dr. R. OHLSON (Sweden), Mr. A. PREVOT (France), Mme. M. T. RICHERT (France), Prof. A. RUTKOWSKI (Poland), Dr. M. TEUPEL (Federal Republic of Germany), Prof. E. TISCORNIA (Italy), Drs. H. J. VOS (Netherlands), Dr. J. C. Van der WEEL (Netherlands), Dr. K. A. WILLIAMS (UK), Mr. F. ZWOBADA (France).

- WG 15**      **Revision of Determination of Acid Value:  
Method II.D.1**  
Drs. H. J. VOS (Chairman—Netherlands), Dr. D. FIRESTONE (USA), Drs. P. W. HENDRIKSE (Netherlands), Mr. W. D. POCKLINGTON (UK), Drs. J. C. Van der WEEL (Netherlands).
- WG 16**      **Determination of Glycerines**  
Mr. A. T. MØLLER (Chairman—Denmark)
- WG 17**      **Determination of Alkaline Soaps**  
Dr. H. BRÜSCHWEILER (Chairman—Switzerland)
- WG 18**      **Determination of Erucic Acid**  
Prof. H. WESSELS (Chairman—Federal Republic of Germany), Dr. J. BEARE-ROGERS (Canada), Dr. Ö. LEVIN (Sweden), Mr. W. D. POCKLINGTON (UK), Dr. K. A. WILLIAMS (UK), Dr. J. P. WOLFF (France), Prof. W. ZWIERZYKOWSKI (Poland).



## **VI.5 COMMISSION ON ATMOSPHERIC ENVIRONMENT**

*(Established in its present form 1977)*

### **Titular Members**

#### *Chairman*

- 1973-1981 Mr. S. G. LUXON,  
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- 1977-1981 Dr. A. J. COLLINGS,  
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- 1973-1981 Dr. M. FUGAŠ,  
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## **VI.6 COMMISSION ON TERMINAL PESTICIDE RESIDUES**

*(Established 1965)*

### **Titular Members**

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- 1973-1979 Dr. P. C. KEARNEY,  
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(TEL: 301-344 3533)

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- 1975-1979 Dr. R. GREENHALGH,  
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- 1971-1979 Dr. R. L. BARON,  
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- 1973-1979 Prof. D. G. CROSBY,  
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- 1975-1979 Prof. R. ENGST,  
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- 1971-1979 Dr. H. GEISSBÜHLER,  
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- 1971-1979 Prof. F. KORTE,  
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1975-1979 Dr. G. G. STILL,  
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## **VI.7 COMMISSION ON PESTICIDE RESIDUE ANALYSIS**

*(Established 1965)*

### **Titular Members**

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- 1977-1979 Dr. S. GORBACH,  
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- 1975-1979 Dr. P. A. GREVE,  
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- 1975-1979 Dr. M. A. KLISENKO,  
Department of Chemistry, All-Union Scientific Research  
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- 1973-1979 Mr. S. G. HEUSER,  
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- 1975-1979 Mr. I. S. TAYLOR,  
Regional Laboratory (Victoria), Australian Government  
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- 1975-1979 Prof. H. P. THIER,  
Institute of Food Chemistry, University of Münster,  
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- 1975-1979 Dr. S. L.J. VITOROVIĆ,  
Pesticide Department, University of Beograd,  
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YU-11081 Beograd, Yugoslavia.

## COORDINATING COMMITTEE ON PESTICIDE CHEMISTRY

### *Chairman*

Dr. H. FREHSE,  
Pflanzenschutz, Anwendungstechnik, Biologische  
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**Titular Members***Chairman*

- 1975-1979 Prof. R. WAGNER,  
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und Wassergütewirtschaft der Universität Stuttgart,  
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*Vice-Chairman*

- 1971-1979 Dr. K. TROBISCH,  
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- 1975-1979 Dr. P. H. SCHWEITZER,  
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und Wassergütewirtschaft der Universität Stuttgart,  
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37 Eli-Cohen-Street,  
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- 1971-1979 Dr. P. GRAU,  
Katedra Technologie Vod, Vysoká Škola Chemicko-  
Technologická v Praze,  
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CS-166 28 Praha 6-Dejvice, Czechoslovakia.
- 1977-1981 Dr. E. I. HAMILTON,  
Institute for Marine Environmental Research, Natural  
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- 1971-1979 Prof. E. A. PEARSON,  
Room 635, Davis Hall, University of California,  
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1977-1981 Mr. P. SCHÖOLTZ-HANSEN,  
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1972-1979 Dr. P. O. BETHGE,  
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1977-1981 Dr. S. FREYSCHUSS,  
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1975-1979 Mr. B. GÖRANSSON,  
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1977-1981 Mr. J. S. LEMLIN,  
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1977-1981 Mr. R. SAVISAARI,  
Vesihallitus,  
POB 250,  
SF-00101 Helsinki 10, Finland.

1971-1979 Dr. E. VASSEUR,  
Statens Naturvårdsverk,  
Fack, S-171 20 Solna, Sweden.

1977-1981 Prof. R. VILAGINES,  
Faculté des Sciences Pharmaceutiques et Biologiques de  
Paris Luxembourg, Université René Descartes,  
4 Avenue de l'Observatoire,  
F-75270 Paris Cedex 06, France.

**National Representative**

*New Zealand*  
1977-1979 Dr. C. D. STEVENSON,  
Chemistry Division, Department of Scientific and Industrial  
Research,  
Private Bag,  
Petone, New Zealand.

## **VI.9 COMMISSION ON RECLAMATION OF SOLID WASTES**

*(Established 1975)*

### **Titular Members**

#### *Chairman*

- 1975-1979 Prof. S. J. PIRT,  
Department of Microbiology, Sir John Atkins Laboratories,  
Queen Elizabeth College,  
Campden Hill,  
London W8 7AH, UK.  
(TEL: 01-937 5411)

#### *Secretary*

- 1975-1979 Dr. R. C. POLLER,  
Department of Chemistry, Queen Elizabeth College,  
Campden Hill,  
London W8 7AH, UK.  
(TEL: 01-937 5411)

#### *Member*

- 1975-1979 Prof. A. E. HUMPHREY,  
107 Towne Building D3, College of Engineering and  
Applied Science, University of Pennsylvania,  
Philadelphia, Pennsylvania 19104, USA.

## STANDING ORDERS OF EXECUTIVE COMMITTEE REGARDING COMMITTEE ON PUBLICATIONS

### Composition and Terms of Office

- (i) There shall be a standing Committee on Publications composed of a Chairman, at least three and not more than six other Members, and the Scientific Editor of *Pure and Applied Chemistry*.
- (ii) The President in consultation with the Executive Committee shall appoint Members. The Committee on Publications may propose names of persons suitably qualified for appointment.
- (iii) The maximum period of service of ordinary Members shall be eight years.
- (iv) The Membership shall be reviewed every two years by the incoming President in consultation with the Executive Committee.
- (v) The President in consultation with the Executive Committee shall appoint the Chairman. The Committee on Publications may propose candidates.
- (vi) The period of service of the Chairman shall not exceed eight years. The sum of years of service as an ordinary Member and as Chairman shall not exceed ten years.

### Terms of Reference

- (i) To advise the President and Executive Committee on all matters of publications including policy.
- (ii) To make recommendations for decision by the President and/or Executive Committee.

# **STANDING ORDERS OF EXECUTIVE COMMITTEE REGARDING COMMITTEE ON SCOPE**

## **Composition and Terms of Office**

- (i) There shall be a standing Committee for SCOPE (ICSU Scientific Committee on Problems of the Environment) composed of a Chairman and not more than seven other Members.
- (ii) The President in consultation with the Executive Committee shall appoint Members. The Committee for SCOPE may propose names of persons suitably qualified for appointment.
- (iii) The maximum period of service of ordinary Members shall be eight years.
- (iv) The Membership shall be reviewed every two years by the incoming President in consultation with the Executive Committee.
- (v) The President in consultation with the Executive Committee shall appoint the Chairman. The Committee for SCOPE may propose candidates.
- (vi) The Chairman of the Committee for SCOPE shall be the official representative of IUPAC on SCOPE. The period of service of the Chairman shall not exceed eight years. The sum of the years of service as an ordinary Member and as Chairman shall not exceed ten years.

## **Terms of Reference**

- (i) To advise the President and the Executive Committee on the programmes and policies of SCOPE.
- (ii) Subject to the prior approval of the President and/or the Executive Committee, to carry out assignments agreed upon with SCOPE and to assist SCOPE generally in its activities.

# **STANDING ORDERS OF EXECUTIVE COMMITTEE REGARDING COMMITTEE ON CHEMISTRY AND INDUSTRY**

## **Composition and Terms of Office**

- (i) There shall be a standing Committee on Chemistry and Industry composed of a Chairman and a Member from each country or region having more than one company Associate.
- (ii) The President in consultation with the Executive Committee shall appoint the Chairman and the Members. Candidates for Chairmanship and Members may be proposed by the Committee on Chemistry and Industry and by National Adhering Organizations having Company Associate programmes.
- (iii) The period of service shall be four years, renewable for a further term of four years.

## **Terms of Reference**

On behalf of the President and Executive Committee:

- (i) To guide and inform Company Associates on IUPAC programmes and policies.
- (ii) To establish important areas of chemical science in IUPAC related to ongoing industrial needs.
- (iii) To put to industry enquiries on major chemical matters.



# **STANDING ORDERS OF EXECUTIVE COMMITTEE REGARDING COMMITTEE ON TEACHING OF CHEMISTRY**

## **Composition and Terms of Office**

- (i) There shall be a standing Committee on Teaching of Chemistry composed of a Chairman, a Secretary, and six other Members.
- (ii) The President in consultation with the Executive Committee shall appoint Members. The Committee on Teaching of Chemistry may propose names of persons suitably qualified for appointment.
- (iii) The maximum period of service of ordinary Members shall be eight years.
- (iv) The Membership shall be reviewed every two years by the incoming President in consultation with the Executive Committee.
- (v) The President in consultation with the Executive Committee shall appoint the Chairman and the Secretary. The Committee on Teaching of Chemistry may propose candidates.
- (vi) The period of service of the Chairman and of the Secretary shall not exceed eight years. The sum of the years of service as an ordinary Member and as Chairman or Secretary shall not exceed ten years.

## **Terms of Reference**

- (i) To advise the President and the Executive Committee on educational matters.
- (ii) To coordinate the educational interests and activities of all IUPAC bodies.
- (iii) To act as an informational and coordinating body for chemical education activities throughout the world and to establish a system of National Representatives as a channel of communication. To develop liaison with international organizations such as UNESCO and with national chemical societies or chemical education committees.

# **STANDING ORDERS OF EXECUTIVE COMMITTEE REGARDING COORDINATING COMMITTEE FOR ANALYTICAL METHODS FOR CEE AND IARC**

## **Composition and Terms of Office**

- (i) There shall be a standing Coordinating Committee for Analytical Methods for the Communauté Européenne Economique (CEE) and the WHO International Agency for Research on Cancer (IARC), composed of a Chairman, a Secretary, and six other Members.
- (ii) The President in consultation with the Executive Committee shall appoint Members. The Coordinating Committee may propose candidates.
- (iii) The maximum period of service of ordinary Members shall be eight years.
- (iv) The Membership shall be reviewed every two years by the incoming President in consultation with the Executive Committee.
- (v) The President in consultation with the Executive Committee shall appoint the Chairman and the Secretary. The Coordinating Committee may propose candidates.
- (iv) The period of service of the Chairman and of the Secretary shall not exceed eight years. The sum of the years of service as an ordinary Member and as Chairman or Secretary shall not exceed ten years.

## **Terms of reference**

- (i) On behalf of the President and the Executive Committee to fulfil the requirements of the annual contract of CEE with IUPAC for the provision of analytical methods.
- (ii) To advise the President and the Executive Committee on analytical methods in connexion with IARC.

# STANDING ORDERS OF EXECUTIVE COMMITTEE REGARDING FINANCE COMMITTEE

## Composition and Terms of Office

- (i) There shall be a standing Finance Committee composed of five Members and a Chairman. In addition, the Treasurer shall be an *ex officio* Member but without voting power.
- (ii) The President in consultation with the Executive Committee shall appoint Members. The Finance Committee may propose names of persons suitably qualified for appointment.
- (iii) The maximum period of service of ordinary Members shall be eight years.
- (iv) The Membership shall be reviewed every two years by the incoming President in consultation with the Executive Committee.
- (v) The President in consultation with the Executive Committee shall appoint the Chairman. The Finance Committee may propose candidates.
- (vi) The period of service of the Chairman shall not exceed eight years. The sum of the years of service as an ordinary Member and as Chairman shall not exceed ten years.

## Terms of reference

- (i) To advise the President and the Executive Committee on financial matters.
- (ii) To make recommendations for decision by the President and/or Executive Committee.
- (iii) To review the IUPAC investment portfolio at least annually and make such changes as appear appropriate.
- (iv) The Finance Committee shall not have executive functions except with respect to dealings in securities. The Finance Committee shall have executive authority with respect to selection, purchases, and sales of securities held by IUPAC, provided that the Treasurer and the IUPAC Banker concur with the decisions of the Finance Committee.

# **STANDING ORDERS OF EXECUTIVE COMMITTEE REGARDING INTER-DIVISIONAL COMMITTEE ON NOMENCLATURE AND SYMBOLS**

## **Composition and Terms of Office**

- (i) There shall be a standing Interdivisional Committee on Nomenclature and Symbols (IDCNS), composed of a Chairman, a Vice-Chairman, a Secretary, the Scientific Editor of PAC, two representatives from each Division, and one representative from the Section on Clinical Chemistry.
- (ii) The President in consultation with the Executive Committee shall appoint the representatives of the Divisions and of the Section on Clinical Chemistry. The Interdivisional Committee, Division Presidents, and President of the Section on Clinical Chemistry may propose names of persons suitably qualified for appointment.
- (iii) The period of service of representatives shall be four years, renewable for a further term of four years.
- (iv) The President in consultation with the Executive Committee shall appoint the Chairman, the Vice-Chairman, and the Secretary. The Interdivisional Committee may propose candidates.
- (v) The period of service of the Chairman, the Vice-Chairman, and the Secretary shall be four years, renewable for a further term of four years. The sum of years as a representative and as Chairman, Vice-Chairman, or Secretary shall not exceed ten years.
- (vi) The following organizations shall be invited to attend meetings of the Interdivisional Committee:
  - Bureau International des Poids et Mesures
  - International Organization for Standardization
  - International Union of Biochemistry
  - International Union of Nutritional Science
  - International Union of Pure and Applied Biophysics
  - International Union of Pure and Applied Physics

## **Terms of Reference**

- (i) To be responsible for submission to the Bureau/Council, in accordance with Bylaw 2.11, for publication or otherwise, any IUPAC document concerned with nomenclature and symbols.

- (ii) Before recommending any material for publication as an IUPAC document, to ensure that the fullest possible consultations have taken place, and the widest possible consensus has been reached among all Divisions, Sections, Commissions, and other bodies of the Union, and between IUPAC and other ICSU bodies, the international standardizing organizations, and Conference Générale des Poids et Mesures (CGPM) and its Committees.
- (iii) To ensure that any considered IUPAC view shall carry the fullest possible weight among other international organizations, all negotiations on matters concerned with nomenclature and symbols with other ICSU bodies, with the international standardizing organizations, and with CGPM and its Committees, shall be conducted through the Interdivisional Committee, which shall advise the Executive Committee accordingly.
- (iv) To be responsible, after consultations with all relevant bodies of IUPAC, for the official IUPAC comments on all documents on nomenclature and symbols sent to the Union for comment.
- (v) To advise the President and Executive Committee on suitable persons for appointment as representatives of IUPAC on other bodies concerned with nomenclature and symbols.







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## Critical Survey of Stability Constants of EDTA Complexes

G. ANDEREGG, *Laboratorium fur Anorganische Chemie der Eidgenossischen Technischen Hochschule, Zurich, Switzerland*

All published values for the stability constants of the metal complexes with (ethylenedinitrito) tetra-acetic acid (EDTA) up to Spring 1976 are discussed critically in relation to used experimental procedures and the involved calculations, where this information is to be found in the literature. For each metal ion reliable recommended values are given.

**Contents:** The protonation constants of EDTA. The stability of metal complexes.

**Of interest to:** Students in chemistry and natural science. Scientists (inorganic, bioorganic, analytical) concerned with problems in solution chemistry.

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IUPAC Chemical Data Series Number 14  
November 1977

## Critical Evaluation of some Equilibrium Constants involving Alkylammonium Extractants

A.S. KERTES, *The Hebrew University of Jerusalem, Israel*

This work was supported by the U.S. National Bureau of Standards, as part of its National Standard Reference Data Series.

**Contents:** Introduction. **Formation Constants of Salts:** Tri-n-octylammonium chloride. Tri-n-octylammonium nitrate. Tri-n-octylammonium sulfate. Tri-n-dodecylammonium chloride. Tri-n-dodecylammonium bromide. Tri-n-dodecylammonium iodide. Tri-n-dodecylammonium nitrate. Tri-n-dodecylammonium perchlorate. References. **Aggregation Constants of Salts:** Tri-n-dodecylammonium chloride. Tri-n-dodecylammonium bromide. Tri-n-dodecylammonium nitrate. Tri-n-dodecylammonium perchlorate. References.

**Of interest to:** Research scientists in analytical chemistry and interested in separation techniques. Chemical engineering scientists. Environmental scientists.

ISBN 0 08 021591 2 f \$6.00 £3.30  
36pp 273 x 190mm /R

IUPAC Chemical Data Series Number 2

## A Critical Review of Equilibrium Data for Proton and Metal Complexes of 1,10-Phenanthroline, 2,2'-Bipyridyl and Related Compounds

W.A.E. McBRIDE, *University of Waterloo, Ontario, Canada*

Acidity constants for the 1,10-phenanthroline and 2,2'-bipyridinium ions and derivatives of these, and stability constants for metal complexes formed by the conjugate bases of these have been compiled from the literature with critical comments on a number of them. The data include values determined in non-aqueous or mixed solvents as well as those for a large number of "mixed" metal complexes incorporating these bases and a second ligand. The survey also contains known values for the enthalpies and entropies of formation for the proton- and metal-ion complexes.

**Contents:** Introduction. Acidity constants. Stability constants of metal complexes. Mixed complexes. Other ternary or higher complexes. Enthalpies and entropies of formation. 21 Tables.

**Of interest to:** Students in chemistry and natural science. Scientists (inorganic, bioorganic, analytical) concerned with problems in solution chemistry.

ISBN 0 08 022344 3 US\$11.00 £6.25  
86pp 273 x 188 mm March 1978 /R

IUPAC Chemical Data Series Number 17

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# NEW IUPAC PUBLICATIONS

## IUPAC COMPENDIUM OF ANALYTICAL NOMENCLATURE "THE ORANGE BOOK"

H.M.N.H.H. IRVING, *University of Leeds, U.K.*  
H. FREISER, *University of Arizona, U.S.A.*  
T.S. WEST, *Macaulay Institute for Soil Research, Aberdeen, U.K.*

The IUPAC Analytical Chemistry Division's efforts to secure full recognition and widespread adoption of the recommended symbols and nomenclature applicable to many disciplines of analytical chemistry have now been published in one volume - "The Orange Book."

The Index has been prepared with the maximum amount of cross-referencing so that the reader seeking guidance on any particular point of nomenclature can be directed quickly to the relevant report or Reports in which it has been discussed.

**Contents (partial):** Preamble. Recommendations for the presentation of the results of chemical analysis. Recommendations for terminology to be used with precision balances. Recommended nomenclature for scales of working in analysis. Recommendations on nomenclature for contamination phenomena in precipitation from aqueous solution. Recommended nomenclature for automatic analysis. Recommendations for nomenclature of thermal analysis. Recommendations for nomenclature of mass spectrometry. Recommended nomenclature for titrimetric analysis. Report on the standardization of pH and related terminology. Practical measurement of pH in amphiprotic and mixed solvents. Recommended symbols for solution equilibria. Recommended nomenclature for liquid-liquid distribution. Recommendations on nomenclature and presentation of data in gas chromatography. Recommendations on nomenclature for chromatography. Recommendations on ion exchange nomenclature. Nomenclature, symbols, units and their usage in spectrochemical analysis-I. General atomic emission spectroscopy.

**Of interest to:** Analytical chemists in a wide range of disciplines.

ISBN 0 08 022008 8	\$25.00	£14.00	
ISBN 0 08 022347 8 f	\$15.00	£ 8.00	/R
228pp			
March 1978			

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## INTERNATIONAL THERMODYNAMIC TABLES OF THE FLUID STATE - 5 METHANE

Editors: S. ANGUS, K.M. de REUCK and B. ARMSTRONG, *IUPAC Thermodynamic Projects Centre, Imperial College of Science and Technology, London*

The Thermodynamic Tables project was inaugurated in 1963 by the Commission on Thermodynamics and Thermochemistry of the Division of Physical Chemistry of the International Union of Pure and Applied Chemistry with the object of compiling internationally agreed values of the equilibrium thermodynamic properties of liquids and gases of interest to both scientists and technologists. The range covered for each fluid is that for which there exist reliable experimental data, and the agreed values are issued as tables upon the basis of which users may produce equations suited to their own special requirements

**Contents:** Preface. Introduction. Symbols. Units and conversion factors; experimental results. Two-phase regions. Single-phase region. Ideal gas properties. The equation of state. The IUPAC tables. Limits of the tables. Use and accuracy of the tables. Recommendations for improvements of the tables. **Appendix:** The density of liquid methane in the region of interest in custody transfer calculations.

**Of interest to:** Physical chemists, mechanical and gas engineers. Scientists involved in the studies of thermodynamics and/or statistical mechanics of fluids, heat and mass transfer, etc.

ISBN 0 08 021981 0	\$40.00	£20.00	
276pp	250 x 176mm		/R
Spring 1978			

IUPAC Chemical Data Series Number 16



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# NEW IUPAC PUBLICATIONS

## BORON CHEMISTRY — 3

Editor: **H. NOTH**, *University of Munich, FRG*

The Third International Meeting on Boron Chemistry was held at Munich and Ettal, FDG, 5-9 July, 1976. This meeting was sponsored by the German Chemical Society and the International Union of Pure & Applied Chemistry (IUPAC). A festive session was held to commemorate the 100th birthday of Alfred Stock.

**Contents:** Alfred Stock and the renaissance of Inorganic Chemistry, WIBERG. Effects of orbital vacancies in Boron compounds, LIPSCOMB. Studies of the smaller Boron hydrides and their derivatives, SHORE. Organo-boranes in synthesis and analysis, KOSTER. Sodium borohydride and amine-boranes, commercially important reducing agents, BUCHER and NIEDERPRUM. The synthesis, structure, and chemical reactions of metallo-boranes, GREENWOOD. NIDO-heteroboranes, STIBER *et al.* The aminoboronation reaction, NIEDENZU. The cyclic coordination of Boron compounds, MIKHAILOV.

**Of interest to:** Research and graduate chemists interested in organometallic and inorganic chemistry.

ISBN 0 08 021206 9      \$19.25    £9.75  
124pp      273 x 188mm    November 1977

Previously published in *Pure & Applied Chemistry*, Volume 49 No. 6, and supplied to subscribers as part of their subscription.

**Of interest to:** Chemists working in the field of coordination chemistry, theoretical chemistry and organometallic chemistry.

ISBN 0 08 021196 8      \$12.00    £6.75  
62pp      173 x 188mm    December 1977

Previously published in *Pure & Applied Chemistry* Volume 49 No. 6 and supplied to subscribers as part of their subscription.

## CRITICAL EVALUATION OF SOME EQUILIBRIUM CONSTANTS INVOLVING ALKYLAMMONIUM EXTRACTANTS

**A.S. KERTES**, *Institute of Chemistry, The Hebrew University of Jerusalem, Jerusalem, Israel*

IUPAC CHEMICAL DATA SERIES Volume 2  
This work was supported by the U.S. National Bureau of Standards, as part of its National Standard Reference Data Series.

The present critical evaluation of the equilibrium constants is based essentially on the tabulation of such constants published under the title "Equilibrium Constants of Liquid-Liquid Distribution Reactions. Part II. Alkylammonium Salt Extractants" (74K).

Data on equilibrium constants involving long-chain alkylammonium salt extractants have not been critically reviewed previously. In this first attempt, only two types of pertinent heterogeneous equilibria could have been considered: (I) the formation constants of alkylammonium salts, and (II) the constants of the aggregation equilibria of these salts in organic solvents employed as diluents in solvent extraction processes.

**Contents:** Introduction. **Formation Constants of Salts:** Tri-n-octylammonium chloride. Tri-n-octylammonium nitrate. Tri-n-octylammonium sulfate. Tri-n-dodecylammonium chloride. Tri-n-dodecylammonium bromide. Tri-n-dodecylammonium iodide. Tri-n-dodecylammonium nitrate. Tri-n-dodecylammonium perchlorate. **References.** **Aggregation Constants of Salts:** Tri-n-dodecylammonium chloride. Tri-n-dodecylammonium bromide. Tri-n-dodecylammonium nitrate. Tri-n-dodecylammonium perchlorate. **References.**

**Of interest to:** Research scientists in analytical chemistry and interested in separation techniques. Chemical engineering scientists. Environmental scientists.

ISBN 0 08 021591 2 f      US\$ 6.00    £3.30  
36pp      273 x 190mm    May 1977

## COORDINATION CHEMISTRY — 17

**E. WEISS**, *University of Hamburg, FRG*

The 17th International Conference on Coordination Chemistry was held in Hamburg, FRG, September 6-10, 1976, and sponsored by IUPAC. The Conference was concerned with recent developments of coordination chemistry in the following fields: (1) Structure and bonding. (2) Novel synthetic routes. (3) Kinetic and reaction mechanisms. (4) Catalytic and technological aspects. (5) New types and concepts in coordination compounds. (6) Bio-coordination chemistry. This volume contains the five plenary lectures.

**Contents:** Retrospect and prospect: 25 years of the I.C.C.C., CHATT. 25 Jahre Ligandenfeldtheorie, HARTMANN. Aromatic transition metal complexes - the first 25 years, PAUSON. Cryptates: Macropoly-cyclic inclusion complexes, LEHN. Koordinations-verbindungen in der Gasphase, SCHAFER.

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# NEW IUPAC PUBLICATIONS

## ETHYLENETHIOUREA

P.C. KEARNEY, *US Department of Agriculture, Beltsville, Maryland*

International Union of Pure and Applied Chemistry: Pesticide Terminal Residue Commission, Applied Chemistry Division. A special report on the occurrence of Ethylenethiourea as a terminal residue resulting from agricultural use of Ethylenebisdithiocarbamate.

Ethylenethiourea is a well known and fairly stable compound. It is employed commercially or industrially as an accelerator in the production of synthetic rubber. When administered under various toxicological experimental conditions, ETU has been shown to have caused, or in some cases suspected to have caused various pathological effects. These, including goiterogenic, tumorigenic and teratological effects, have raised some questions regarding the possible harmful effects as terminal residues of the relevant dithiocarbamate fungicides.

**Contents:** 1. Analytical Methodology. 2. Chemistry of Ethylenethiourea (ETU). 3. Dynamics and transformation of ETU residues. 4. Processing and cooking effects on EBDC's. Conclusions, Recommendations.

**Of interest to:** Graduate and research workers in organic chemistry, farmers, agricultural advisers and pest control specialists. Processed food manufacturers.

ISBN 0 08 022026 6 f US\$ 6.00 £3.30  
14pp 273 x 188mm August 1977

Previously published in *Pure & Applied Chemistry*, Volume 49 No. 5, and supplied to subscribers as part of their subscription on.

## ADVANCES IN SMOKING OF FOODS

A RUTKOWSKI, *Agricultural University of Warsaw, Poland*

This international symposium was sponsored by the International Union of Pure and Applied Chemistry (IUPAC) and the International Union of Food Sciences and Technology (IUFOST), Warsaw, 8-10 September, 1976.

Although the smoking or smoke flavouring of foods is an age-old process, many changes have occurred in recent years. Four general factors have influenced these changes, and/or supplied the need for change, namely, (1) the desire for the better control of the flavour and colour of smoked foods, (2) the concern for possible carcinogenesis by components in wood smoke, (3) the need to reduce smoke effluent and (4) the constant need for better plant design and faster output.

**Contents:** The phenomena of quality in the smoke curing process, TILGNER. Physical and chemical

processes involved in the production and application of smoke, RUSZ and MILLER. Analysis of smoke and smoked foods, HAMM. Contribution of smoke compounds to sensory, bacteriostatic and anti-oxidative effects in smoked foods, BARYLKO-PIKIELNA. Some facts and legislation concerning polycyclic aromatic hydrocarbons in smoked foods, WALKER. Novel concepts in technology and design of machinery for production and application of smoke in the food industry, HOLLENBECK.

**Of interest to:** Manufacturers and food technologists, bacteriologists, physicochemists and organic chemists.

ISBN 0 08 022002 9 US\$16.00 £8.90  
76pp 273 x 188mm February 1978

Previously published in *Pure & Applied Chemistry* Volume 49 No. 11, and supplied to subscribers as part of their subscription.

## MYCOTOXINS IN FOODSTUFFS - 3

M. JEMMALI, *INSERM-INRA-16, rue Nicolas Fortin 75013, Paris*

The Third International Symposium on Mycotoxins in Food stuffs, Paris 16-18, 1976 was sponsored by the International Union of Pure and Applied Chemistry (IUPAC). The French Committee for Chemistry and the French Committee for Sciences of Nutrition.

The emphasis of the Symposium was on control measures for mycotoxins in foodstuffs and on the toxicological aspects. The important subject of decontamination was one of the key features of the Symposium.

**Contents:** Food mycotoxins survey and monitoring programs, CAMPBELL. Sampling granular foodstuffs for aflatoxin, WHITAKER. Mycotoxin tolerances in foodstuffs, KROGH. Mode d'action des mycotoxines, MOULE. Mode of action of Trichothecenes, UENO. Mode of action and human health aspects of aflatoxin carcinogenesis, BUTLER and NEAL. Short-term tests and mycotoxins, MALAVEILLE and BARTSCH. Review of prevention, elimination and detoxification of aflatoxine, GOLDBLATT and DOLLEAR. The mycotoxins and human health hazards, LINSELL. Metabolism of aflatoxin and other mycotoxins in relation to their toxicity and the accumulation of residues in animal tissues, PATTERSON. Some new mycotoxins, STEYN.

**Of interest to:** Research workers from university, industry and government institutions dealing with applied biology, microbiology, contamination of raw materials and phytopathology.

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74pp 273 x 188mm February 1978

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# NEW IUPAC PUBLICATIONS

## LOW MOLECULAR WEIGHT SULPHUR-CONTAINING NATURAL PRODUCTS

International Symposium on Low Molecular Weight Sulphur-Containing Natural Products, Jablonna, Poland, 6–10 July 1976

Editor: **J.T. WROBEL**, *Department of Chemistry, University of Warsaw, Poland*

### Contents:

Low molecular weight sulphur-containing compounds in nature: a survey: **KJAER**. Oxidation of some biologically active and related sulfur-containing compounds: **OAE et al.**  $\alpha$ -mercapto- $\alpha$ -amino acids and dehydro amino acids. Syntheses, relationships and interconversions: **SCHMIDT**. Properties of sulfur-containing nuphar alkaloids: **LALONDE** and **WONG**. New aspects of the chemistry of biotin and of some analogs: **MARQUET**. Glucosinolates: **BENN**.

**Of interest to:** Biochemists, pharmacologists.

ISBN 0 08 021204 2      \$16.50    £8.50  
74pp      273 x 188mm      July 1977

Previously published in **Pure & Applied Chemistry**, Vol. 49, No. 2, and supplied to subscribers as part of their subscription.

## PHYSICAL ORGANIC CHEMISTRY — 3

Third IUPAC Conference on Physical Organic Chemistry; La Grande-Motte, Montpellier, 6–10 September 1976

Editor: **A. FRUCHIER**, *Université des Sciences et Techniques du Languedoc, Montpellier*

### Contents:

Equilibrium acidities of carbon acids: **BORDWELL**. Micellar catalysis and inhibition: **BUNTON**. Quantum chemical studies of CO, CS and related double bonds: **KUTZELNIGG**. Some mechanistic studies on the hydrolysis of acetals and hemiacetals: **CAPON**. Mechanisms and catalysis in vinyl ester hydrolysis: **EURANTO**. General acid-base catalysis of carbonyl and acyl group reactions: **JENCKS** and **GILBERT**. Strain energy modeling of simple and crowded aliphatic

ketones: spectroscopic properties: **DUBOIS**. Stereochemistry of dissolving metal reduction of ketones: **RASSAT**. The hydrolysis of phosphate esters: **WESTHEIMER**.

**Of interest to:** Organic chemists, teachers and graduate students.

ISBN 0 08 021197 6      \$17.00    £9.50  
110pp      273 x 188mm      December 1977

Previously published in **Pure & Applied Chemistry**, Volume 49, No. 7, and supplied to subscribers as part of their subscription.

## CARBOHYDRATE CHEMISTRY — 8

8th International Symposium on Carbohydrate Chemistry, 16–20 August, 1976, Kyoto, Japan

Editor: **K. ONODERA**, *Kyoto University, Japan*

### Contents:

The selective degradation of carbohydrate polymers: **ASPINALL**. Conformations of uronic acid containing polysaccharides: **ATKINS**. Fourier transform NMR Spectroscopy. Nitrogen-15 studies of amino sugars: **COXON**. Lectins as carbohydrate-binding proteins: **GOLDSTEIN**. Approaches to the total synthesis of natural products from carbohydrates: **HANESSIAN** and **RANCOURT**. Glycosphingolipids with blood group A, H and I activity and their changes associated with ontogenesis and oncogenesis: **HAKOMORI et al.** Recent aspects of the chemistry of disaccharides: **HOUGH**. Structural studies of some bacterial polysaccharides: **LINDBERG**. Synthesis of amino- and branched chain mono- and oligosaccharides: **PAULSEN**. Structural features of the *Bordetella Pertussis* endotoxin: **SZABO**. Direction of carbohydrate research in the near future: **WHISTLER**.

**Of interest to:** Research graduates in carbohydrate chemistry and biochemistry and postgraduate students majoring in organic chemistry or biochemistry. Pharmacologists.

ISBN 0 08 022001 0      \$27.00    £15.00  
172pp      273 x 188mm      December 1977

Previously published in **Pure & Applied Chemistry**, Volume 49, No. 8, and supplied to subscribers as part of their subscription.

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# HOW TO NAME AN INORGANIC SUBSTANCE

Guide to the Use of Nomenclature of Inorganic Chemistry (The Red Book)

Editor: **W. CONARD FERNELIUS**, *Kent State University, Ohio 44242*

The recommendations of the IUPAC Commission on Nomenclature of Inorganic Chemistry embodied in "NOMENCLATURE OF INORGANIC CHEMISTRY" (2nd Ed.) 1970 are the international standard for English speaking chemists, and, through translation, for chemists speaking other languages. It is a matter of concern to the Commission that Recommendations are not always followed by practising chemists. Although the rules are detailed and extensive, some chemists without a broad working knowledge of inorganic chemistry report that they find the rules difficult to apply to specific cases. It is hoped that this Guide will aid all who have occasion to use "The Red Book" to locate more quickly those portions of the rules (indicated by rule number) that are pertinent to their areas of interest.

The Guide has been developed along the following lines:

- 1) A step by step procedure was developed for relating a compound to the type of name appropriate to it.
- 2) Table II, "Names for Ions and Radicals", was greatly expanded and annotated so that a person needing to name a compound could locate the compound or a similar one in the table and go directly to the appropriate rule.
- 3) A new approach has been to expand the table of examples so that more than 350 compositions are listed and names provided for that composition as molecule, radical, cation, anion and ligand. Corresponding to each of these names is the reference to the specific rule covering the formation of that name.
- 4) Where a specific substance is not covered by a rule in the Red Book, references to other standard compendia are provided.

**Contents:** Note of explanation. Introduction. What is an inorganic compound? Group names. Background principles involved in or related to nomenclature. Types of names used in chemistry: 1. Simple binary names. 2. Molecular hydride or -ane names. 3. Substitutive names (§ C-0, 1). Cations derived by proton addition to molecular hydrides. 5. Oxo acids and their salts. 6. Condensed acids and their salts. 7. Mixed salts. 8. Replacement names. 9. Coordination names (§ 7). 10. Functional class names. 11. Functional suffix nomenclature. 12. Additive names. Subtractive names. Procedure. References. Names for ions and radicals. Table of atomic weights 1975.

ISBN 0 08 021982 9      \$5.50      £2.80      35pp      250 x 176mm

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